

Do the compounds have the same molecular formula?

No  $\Rightarrow$  Not isomers

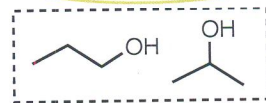
Yes  $\Downarrow$

Isomers  $\Rightarrow$

Do the compounds have the same connectivity of atoms?

No  $\Rightarrow$

Constitutional isomers



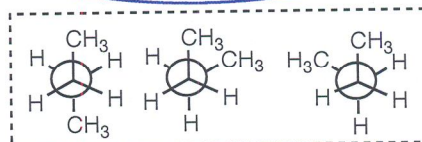
Yes  $\Downarrow$

Stereoisomers

Can the compounds interconvert by rotations along single bonds?

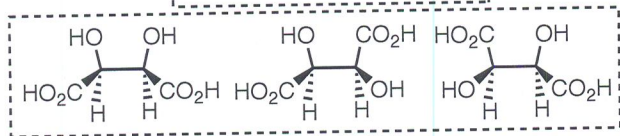
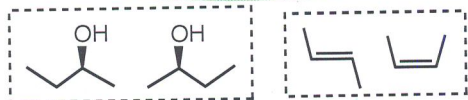
Yes  $\Rightarrow$

Conformational isomers



No  $\Downarrow$

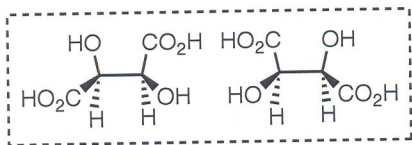
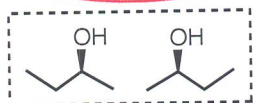
Configurational isomers



Are the compounds nonsuperposable mirror images of each other?

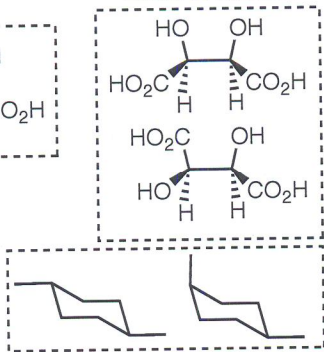
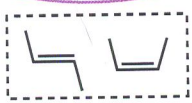
Yes  $\Rightarrow$

Enantiomers



No  $\Rightarrow$

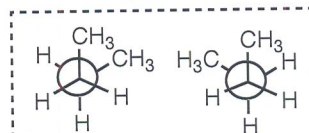
Diastereomers



Are the compounds nonsuperposable mirror images of each other?

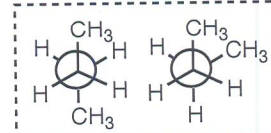
Yes  $\Rightarrow$

Enantiomers



No  $\Rightarrow$

Diastereomers



Do the compounds readily interconvert at ambient temperatures?

Yes  $\Rightarrow$

Their chirality has no consequences at ambient temperatures.

No  $\Downarrow$

Atropisomers

